WAGNER (C.)

A PAPER

ON

INTRA-LARYNGEAL GROWTHS

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INTRA-LARYNGEAL GROWTHS.

BY CLINTON WAGNER, M.D.

The following cases of intra-laryngeal growths are described somewhat at length, not from any special interest which they possess individually, for, with a few exceptions, they are of a character which any one engaged in throat practice may frequently observe, but taken collectively, they are valuable from a statistical standpoint, as they demonstrate the frequency of this interesting pathological condition, and may, perhaps, aid in refuting certain objections that have been raised by a recent writer * against their removal per vias naturales.

Before the introduction of the laryngoscope as a means of diagnosis, polypus of the larynx was regarded as of very rare occurrence. † Ehrman, in 1850, as a result of his researches, could find but twenty-six authenticated cases, all of which proved fatal except three.

A few years later, Dr. Horace Green, to f New York, in an able monograph, gives the entire number of recorded cases as forty, thirty-seven of which resulted fatally. Seven or eight of the cases occurred in this country, four in his own practice extending over a period of five or six years. When we reflect that Dr. Green had an immense special throat practice, we can realize in

^{*}The Throat and its Diseases, Lennox Browne. London. 1878.

[†] Historie des Polypes du Larynx, C. H. Ehrman, 1850.

Polypi of the Larynx, Horace Green, M.D., New York, 1859.

a measure the large number of cases of growths that must have been overlooked for want of means of obtaining an accurate diagnosis—to quote his own language, "the symptoms indicative of the existence of these growths are not sufficiently defined to warrant us in laying down positive rules of diagnosis." I venture to assert that during the past five years, since the introduction of the laryngoscope into general practice, one hundred and fifty would be a small estimate for the number of cases treated in this city alone.

Symptoms.—Alteration of voice, cough, and dyspnœa, with a tendency to spasm of the glottis upon making the slightest exertion.

Voice.—The alteration of voice may range from slight huskiness or hoarseness to partial or complete aphonia; it is distinctive through its peculiar vibratory tone and metallic ring, and differs strikingly from the soft whisper of functional aphonia from paralysis of the adductors, the disagreeable huskiness of syphilitic laryngitis, or the unpleasant squeaking falsetto frequently met with in uni-lateral paralysis of the adductors. I have in some cases been enabled to establish a diagnosis from the voice alone, even before making a laryngoscopic examination.

Cough is by no means an invariable symptom, and, when present, is generally of a short, dry, hacking character, caused by a movable or pedunculated growth.

Dyspnœa will be found only in those cases in which, from the size and position of the growth, the normal caliber of the larynx is greatly lessened.

Treatment.—In the treatment of the following cases, I practised evulsion by means of Mackenzie's forceps, the best adapted and safest instruments for the purpose that have yet been devised. They are greatly to be preferred to the guillotine of Stærck, with which it is impossible to remove a sessile growth from the superior surface of the cords, or the awkwardly working tube forceps of Schrötter, and other continental laryngoscopists, on account of the facility of introduction and the ease with which they can be opened or closed after having entered the larynx.



Mr. Lennox Browne, * in advocating non-instrumental interference by way of the mouth, states that serious complications or accidents are liable to follow the introduction of the forceps, such as ulceration, paralysis, perichondritis, caries, injury to the arytenoids, or death from spasm of the glottis.

My experience includes many cases in addition to those reported in this paper, and I have never seen any unpleasant effects follow further than a slight congestion of the mucous membrane, lasting a day or two, and during which the introduction of the forceps was, of course, omitted. With reference to the objection that spasm of the glottis may arise, I would state that I have introduced the forceps and carried them to the sub-glottic region in cases in which the entire box of the larnyx was filled with growth, and no ill effects have followed, and I believe that, with a surgeon who has attained a fair amount of skill in the use of laryngeal instruments, the operation for the removal of growths through the mouth by means of Mackenzie's forceps is as devoid of danger, as the passing of a catheter into the bladder, a sound into the uterine cavity, or the needle of an aspirator into a purulent liver-

CASE I:-SMALL PAPILLOMA ON LEFT VOCAL CORD-CURE.

Miss C., of New Jersey, aged twenty-five, consulted me in September, 1874, at the suggestion of my friend Dr. Hackley, for a hoarseness, which for nearly two years had prevented her taking the higher notes in singing, and had lately begun to show itself in conversation. The patient was of a very frail, delicate organization, and her parents were inclined to attribute the huskiness in her voice to phthisis pulmonalis, more particularly as they had lost one daughter from that disease.

An examination which was made with great difficulty, owing to nervousness of the patient, irritability of the pharynx and a pendulous epiglottis, revealed nothing to account satisfactorily for the change of voice. The examination was not prolonged, but she was requested to call again in a few days. During the second

examination, the patient gave a short, quick cough; at that moment, a small growth came into view, which proved to be attached to the under surface of the left vocal cord, at about the junction of the anterior with the middle third. During quiet



breathing the growth could not be seen, but whenever a violent effort was made, for instance, during loud talking, singing or coughing, it was thrown upwards and caught between the cords, but was so small, soft, and compres-

sible, that it did not prevent approximation, but interferred only with the fine or more rapid vibrations of the cord, accounting for the huskiness and explaining why there was not aphonia.

The treatment of this case in overcoming the sensitiveness of the larynx, and the natural timidity of the patient was tedious and prolonged, but finally, after I had succeeded in introducing the forceps without provoking instant spasm of the glottis, I instructed her to give a short, violent cough, while the instrument was in the larynx. This, as I expected, threw the growth upwards and between the cords, at which moment I succeeded in seizing and removing it. The patient recovered a singing voice, but not a mezzo-soprano. She sings in contralto, clearly and without effort. I must confess that I cannot explain the cause of this change of key. I have examined this patient quite recently, three and a half years after the operation, there has been no recurrence of the neoplasm, voice and general condition excellent.

CASE II.—LARGE FIBROMA ATTACHED TO UNDER SURFACE OF RIGHT VOCAL CORD—CURE.

George E.; occupation, butcher; German; age, thirty-six; large, muscular, and robust, stated that he first observed hoarseness about two years ago, the consequence he thinks of a severe cold. He has no cough, but complains of a constant tickling in his throat; at times he is quite aphonic, but generally his voice has the peculiar metallic, vibratory ring, so distinctive of laryngeal growths.

An examination with the laryngoscope revealed a large fibrous growth about the size of and somewhat resembling a bean, attached by a pedicle to the under surface of the right cord at about its junction with the middle and anterior thirds. During quiet breathing the tumor would drop below the cords and almost disappear from view (as represented in the adjoining cut), but



during the act of phonating it was forced upwards and lay either upon the surface of the cords or between them.

The epiglottis in this case was very pendulous, and the larynx difficult to illuminate, owing to which and the thickness

of the base of the tongue, the best and most satisfactory view could only be obtained by depressing that organ with the spatula instead of causing it to be protruded as in the ordinary examination.

Several unsuccessful efforts were made to seize the tumor during quiet respiration. I then directed him to make the ah! sound loudly and forcibly, during which I rapidly introduced the forceps and caught and severed the entire growth and pedicle from its attachments—voice returned at once.

The following cut represents the growth and pedicle after removal, exact size:



CASE III.—Small Papilloma of Right Vocal Cord—Removal—Cure.

Professor S.; native of Germany; age, forty-five; principal of a large school for boys, consulted me for loss of voice in February, 1876. He stated that for several years he had suffered from a hoarseness, but about four months previous to consulting me, he became quite aphonic, and has remained so ever since.

A laryngoscopic examination revealed upon the right cord and just anterior to the processus vocalis a polypus about the size of a small pea, overlapping the free edge of the cord and preventing



approximation, thus accounting for the aphonia. The throat of this gentleman was capacious, well-developed, and the larynx could be entered without difficulty; a few days were occupied in overcoming the irritability of

the pharynx, when the forceps were introduced, the growth seized, crushed, and successfully removed at one sitting—voice returned immediately. An examination made over two years after the operation could detect no trace of the growth—voice excellent.

CASE IV.—Small Papilloma on Left Vocal Cord—Removal—Cure.

Patrick, æt. 48; occupation, porter; consulted me December 10, 1877, at the Metropolitan Throat Hospital, for chronic hoarseness, which had existed for over a year, at times quite aphonic. An examination disclosed a small papilloma on the free edge of the left cord, in its anterior portion, preventing perfect approxi-



mation. No preliminary training was adopted in this case; the growth was seized and removed upon the first introduction of the forceps. Voice was restored at once, and he informs me that he sings without difficulty in his Sunday-school.

An examination a few weeks ago, and five months after the operation, could discover no trace of the growth.

CASE V.—LARGE PAPILLOMA ON BOTH CORDS—REMOVAL—
IMPROVEMENT.

Jennie M., æt. 19; occupation, singer; consulted me at the Metropolitan Throat Hospital, April 3, 1878. She stated that

two years ago hoarseness came on slowly, and she was compelled to discontinue singing. Attributes the hoarseness to a severe cold.

An examination revealed a large papilloma on the left ventricular band, almost completely obscuring the left vocal cord; upon the right vocal cord was another covering the anterior third, and a still smaller one springing from the under surface of the same cord.



Several days were consumed in overcoming the irritability of the pharynx and the general nervousness of the patient, and, owing to the latter, three sittings were required for the removal of the mass. A small portion of that

attached to the under surface of the right vocal cord still remained, but, as the improvement in her voice and breathing was so marked, she declined further operative interference for the present.

CASE VI.—Small Cystic Growth on Epiglotits—Removal —Cure.

J. R., aged thirty-eight; occupation, tailor; consulted me at Metropolitan Throat Hospital, March, 1874, for sore throat. In addition to a follicular pharyngitis, I discovered a small cystic



growth at the junction of the epiglottis with ary-epiglottic fold, right side. It was crushed, without difficulty, with Mackenzie's forceps. No return after several months.

CASE VII.—Symmetrical Out-Growth on the Vocal Cords—Cure.

Miss B., aged twelve; brought to me by her parents, in March, 1875, for hoarseness, for which she had been compelled to discontinue her singing lessons. Upon the anterior third of each cord I discovered a nodule, about the size of a very small pin

head, apparently of a fibrous character, and seemingly thoroughly



incorporated with the cord tissues; approximation was scarcely interfered with, but the finer vibrations were. I did not deem instrumental interferference prudent in this case, but explained to the parents that a cure

might be effected by topical applications, but that the treatment would be tedious.

For about two years, applications of zinci chlorid., grs. xv to water one ounce, were made at intervals varying from five days to several weeks; occasionally the solid nitrate of silver was applied, but I found the zinc decidedly more efficacious. The nodule has entirely disappeared from the left cord, and but a mere trace remains on the right cord. The voice is clear, and she sings without difficulty.

CASE IX.—Ecchondrosis of Left Side of Thyroid—No Relief.

J. H., aged thirty; Irish; consulted me at the Metropolitan Throat Hospital, at the suggestion of Dr. Moore, of Troy. About a year previous tracheotomy had been performed for laryngeal dyspnœa, which had suddenly become alarming; since then has worn the canula; has had syphilis.

An examination revealed a large rounded mass on the left side of the larynx, just anterior to the left arytenoid, and filling almost its entire cavity. I performed thyrotomy, and found that the tumor grew from the thyroid, very hard and firm, and, without doubt, of the very rare variety known as an ecchondrosis. I could make no impression upon it, either with gouge or knife, and attempts at removal brought on violent paroxysms of spasmodic coughing, although the patient was fully under the influence of ether.

I saw and examined him about fourteen months after the operation; apparently no change had taken place. CASE X.—Papillomatous Growth—Posterior Wall of Larynx—Operation Deferred.

Mrs. B., aged thirty-seven; German; consulted me at the Metropolitan Throat Hospital, for complete aphonia, which had existed for several months. Slight dyspnœa was also present.

An examination discovered a large papilloma growing from the

posterior wall of the larynx and filling the interarytenoid space and preventing approximation of the cords.

This woman was very nervous and timid, and as she was six months advanced in pregnancy, I deemed it prudent to defer operative measures.



CASE XI.—PAPILLOMA LEFT VOCAL CORD—IMPROVEMENT.

T. L., a German, aged forty-two; consulted me February, 1878, at the Metropolitan Throat Hospital, for hoarseness and tickling in his throat, which he first noticed a little over a year ago; his voice had the peculiar metallic ring so frequently observed in laryngeal growths.

A laryngoscopic examination revealed a papillomatous growth



upon the posterior third of the left vocal cord, projecting but slightly over the free edge. The greater portion was removed without difficulty in three sittings, when he discontinued his attendance at my clinic.

CASE XII.—MALIGNANT GROWTH OF RIGHT SIDE OF LARYNX—
THYROTOMY PERFORMED FOUR TIMES—RECURRENCE.

Mr. C., aged forty seven; occupation, farmer; consulted me in October, 1875. He stated that about two years previous he first noticed the hoarseness, which increased until at the time of consulting me he was quite aphonic.

An examination revealed on the right cord, covering the middle and extending well into the anterior third, a sessile growth which projected over the free edge of the cord and prevented



approximation. At this time, I had no doubt from its general appearance that the growth was of a papillomatous character. I removed the greater portion with the forceps, after which I resorted from time to time to local

astringent and caustic applications to destroy the little that remained.

In November, 1876, but a small portion remained; he then informed me that he probably would not be able to visit my office for about one month. He did not return, however, until the following April, at which time a great change had taken place; the growth had extended backwards and upwards, filling almost the



entire right side of the larynx. I made no attempt at removal on that day, as he preferred waiting. He left intending to return within a week; I cautioned him to lose no time in doing so, if his breathing became at all impaired. He returned in

about a month for treatment, at which time there was great dyspnœa, the growth had extended downwards below the right cord, producing considerable lessening of the laryngeal calibre.

After a consultation with several medical friends, I determined to temporize and attempt again the removal by the mouth. A large amount was taken out in this way, sufficient to fill a small homepathic vial, but it was reproduced so rapidly that it seemed almost to increase under my eyes.

At this time the stenosis was so great that he breathed with difficulty, especially upon making the slightest exertion, such even as walking across my office.

Deeming it unsafe to defer tracheotomy any longer, on the 10th of June, 1877, this operation was performed at the Metropolitan Throat Hospital, immediately after which a thyrotomy, the growth extended downwards to the cricoid cartilage; it was thor-

oughly removed, the cord destroyed, and the galvano-cautery freely applied to all the surface which had been covered by it. Two months later in August the operation of thyrotomy was repeated, again in October and March of this year, omitting in the last two the galvano-cautery and substituting a solution of zinci chlorid, grs. xxx to 3i aq.

The portions of growth removed by evulsion and also by thyrotomy were submitted to several eminent microscopists of this city for examination.

The first pronounced it an "hypertrophy caused by lymphoid infiltration." "There are no distinct characteristics of a new growth." But upon being told the clinical history of the case, called it a "small round cell sarcoma."

The second reported that it belonged to the class usually called "papilloma," while the third regarded it as a "mixed" growth of the variety known as "epithelioma-papilloma." "Such tumors are of tolerably frequent occurrence on the mucous membranes, and their prognosis is usually very good."

The severe and constant pain which the patient has suffered from for some months past, together with the infiltration of the surrounding soft parts, the caries of the cartilages of the right side, the rapidity of recurrence after thorough removal, and the excessive vascularity of the neoplasm, leave no doubt in my own mind of its malignant character. Whether sarcoma or epithelioma-papilloma I am not prepared to decide; but simple or ordinary papilloma it cannot be.

The non-engorgement of the cervical lymphatics, the excellent condition of his general health, the non-extension of the disease to the pharynx, left side of the larynx, or the trachea induce me to regard its malignancy as of a mild type.

Removal of the larynx has been considered and proposed to the patient, but he declined an operation which, in his case at least, could not promise a prolongation of his days.

I shall perform thyrotomy at least once more in this case, and still again, should the circumstances justify it, as they hitherto have done.

CASE XIII.—Large Papillomatous Growth, Left Side of Larynx.

L. R., aged fifty-nine; American; occupation, farmer; consulted me at the Metropolitan Throat Hospital, November 12th, 1874. He stated that hoarseness came about twenty-two months previous, but about eight months ago lost his voice entirely.

An examination revealed a large mass on the left side of the larynx, starting from base of epiglottis, partly covering ary-epiglottic fold, and reaching to the left cord, which was not visible.



The growth was evidently of a papillomatous character; there was dyspnœa from the stenosis. He left the hospital, promising to return for operation, but failed to do so.

CASE XIV.—CANCER OF THE LARYNX—TRACHEOTOMY—DEATH.

J. L., aged fifty-six; German; consulted me at the Metropolitan Throat Hospital, May, 1874, for loss of voice and pain in his throat, which had begun, as nearly as he could remember, about eighteen months previous.

The patient was quite aphonic, and suffering greatly from dyspnœa; no enlargement or engorgement of the cervical lymphat s.

A laryngoscopic examination revealed an irregular nodulated mass covering the entire left side of the larynx, from the base of the epiglottis to the sub-glottic region, and producing decided stenosis. There was no evidence of tuberculosis, nor was there a syphilitic history; however, he was given the benefit of the doubt, and specific treatment was fairly tried, without beneficial result.

The dyspnea increasing, tracheotomy was performed to escape the fatal consequences of sudden spasm of the glottis. I had, also, decided upon removal of the larynx at a later period, the patient having given his consent, but, after the tracheotomy, he failed rapidly, and died on the sixtieth day.

A post-mortem showed that the disease extended below the

cricoid, involving that as well as the other cartilages of the larynx.

The following cases were reported by me in the New York *Medical Journal*, for March, 1874. I have seen both patients quite recently, nearly five years have elapsed since the operations, voices are excellent, and no recurrence or trace of the growths.

G. S., aged thirty-one, native of Ireland, occupation laborer, sent me for treatment, September 18, 1874, by Dr. J. H. Pooley, of Yonkers (now Professor of Surgery in Starling Medical College, Columbus, Ohio.)

He stated that hoarseness had begun about four years ago. During the past six months it had increased, and, at the time of reporting to me, he was quite aphonic. On laryngoscopic examination, the papillomatous growths were seen, the larger covering the right vocal cord for nearly two-thirds its length, a portion of which was attached by pedicle to the right ventricular band; a small growth occupied the middle third of left vocal cord.



The operation was performed after three days' preliminary training, and completed at one sitting. A small portion of the pedicle by which the tumor was attached to the right ventricular band, and also part of the growth on the left vocal cord were left for a subsequent operation, in consequence of

the hemorrhage which ensued.

The case was presented to the New York Laryngological Society three and a half months after the operation—voice perfect, and no return of growths.

CASE XVI.—H. J., aged thirty-eight; native of Germany; occupation merchant, has suffered from hoarseness for two years, at times scarcely able to speak above a whisper.

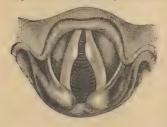
A laryngoscopic examination showed a papillomatous growth, on the right vocal cord, about the size of a large pea, and extend-

ing from the floor of the ventricle to the free edge of the cord, over which it projected, preventing approximation.



This patient's larynx was very narrow, and extremely sensitive to the introduction of instruments. The entire growth was removed after several trials, excepting a portion about the size of a pin's head, which disappeared without further operative interference.

In the same number of the New York Medical Journal, I reported a case very similar to Case VII. She was under treat-



ment for six months, there was marked improvement in the voice at the expiration of that period, but scarcely any diminution in the size of the nodules. Another case of precisely the same character has quite recently consulted me, and is at the present time under treatment.

Since writing the above, I have performed the fifth thyrotomy upon Mr. C. (case XII.) The operation was performed at the Metropolitan Throat Hospital, July 9, 1878. No anæsthetic was given, ihe parts were very vascular, and the hemorrhage profuse. A larger quantity of growth was removed than in any of the preceding operations. Zinci chlorid. grs. xxx to 3i aq. was freely applied to the surface after its removal. At the time of writing, July 18, the patient's general condition is excellent. No recurrence of the growth has as yet taken place.

The following interesting case has quite recently come under my care:

CASE XVIII.—LARGE PAPILLOMA FILLING ANTERIOR COMMISSURE AND CONTERING ONE-THIRD OF RIGHT CORD—HOARSE FOR THIRTY-ONE YEARS—REMOVAL—CURE.

W. N., aged fifty-one years; native of Scotland; occupation,

printer. Consulted me at the Metropolitan Throat Hospital, July 9, for loss of voice. He stated that thirty-one years ago, while a soldier in the British army, he contracted a severe cold from exposure on the march, since which time he has been almost completely aphonic. In 1850 he consulted Dr. Hughes Bennett, of Edinburgh, who suspected the presence of a polypus, and introduced a sponge probang charged with a strong solution of argent. nitras. He subsequently consulted another eminent Seotch physician, who advised a mercurial course for the hoarseness. This the patient declined.

For the past ten years he has had no treatment except syrups, cough mixtures, and troches.

An examination with the laryngoscope revealed a very large papilloma filling the anterior commissure above and below the

> insertions of the cords, and covering completely the anterior third of the right cord.

> Without preliminary training the forceps were introduced, and about one-half of the mass removed. The

remainder was taken away in two subsequent sittings. Voice excellent.

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